CIVIL AIM CONSULTANTS & ENGINEERS

(Building Geo-Tech & Highway Materials Testing Laboratory)

An ISO 9001-2015 Certified Company
NABL Accredited As Per ISO/IEC 17025:2017 Laboratory

Ref: CACE/BBMP/EE/DIV/YNK/16/2023-24

Name of Work : 'Repair and Renovation to Samudaya Building at JP Colony in ward no-05 Yelahanka New Town Sub division", BBMP, Bangalore.

Name of Client	:	:	**Executive Engineer, Yelahanka Division, BBMP, Bangalore.**
Contractor/Agency	:	:	**Sri Akhilesh C , Contractor, Bangalore.**
Bill Amount	:	:	Rs10.14 Lakhs
Date of Inspection	:	:	01.06.2023
Status of Bill	:	:	First and Final
In the Presence of	:	:	(a)**Assistant Engineer Ward No.05 , BBMP, Bangalore.**
	:	:	(b) **Mr. Prajwal H,** Engineer M/S Civil Aim Consultants & Engineers

Sl.No	Description of the Item	Unit	Qty	Comments / observations
1	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material to the appropriate disposal area as per direction of Engineer-in-charge.	Cum	14.40	Work done up to the billed quantity and Quality is satisfactory
2	Extra for cutting reinforcement bars manually/ by mechanical means in R.C.C. or R.B. work (Payment shall be made on the cross sectional area of R.C.C. or R.B. work) as per direction of Engineer-in-charge.	Cum	13.20	Work done up to the billed quantity and Quality is satisfactory
3	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material to the appropriate disposal area as per direction of Engineer-in-charge.	Cum	13.08	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item	Unit	Qty	Comments / observations
6	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ m2 including grouting the joint with white cement & matching pigments etc. complete.	Sqm	48.01	Work done up to the billed quantity and Quality is satisfactory
7	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc .copmplete.	Sqm	69.66	Work done up to the billed quantity and Quality is satisfactory
8	Earth work excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. Depth exceeding 1.5m, but not exceeding 3 m	Cum	3.75	Work done up to the billed quantity and Quality is satisfactory
	Qty Executed Above 125%	Cum	21.31	Work done up to the billed quantity and Quality is satisfactory
9	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.	Cum	0.25	Work done up to the billed quantity and Quality is satisfactory
	Qty Executed Above 125%	Cum	2.26	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item	Unit	Qty	Comments / observations
10	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates	Cum	0.38	Work done up to the billed quantity and Quality is satisfactory
	Qty Executed Above 125%	Cum	2.50	Work done up to the billed quantity and Quality is satisfactory
12	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/ trap/ basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) M25 Design Mix Using 20 mm nominal size graded crushed coarse aggregates	Cum	0.75	Work done up to the billed quantity and Quality is satisfactory
	Qty Executed Above 125%	Cum	5.51	Work done up to the billed quantity and Quality is satisfactory

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SLNo	Description of the Item	Unit	Qty	Comments / observations
16	Providing Thermo-Mechanically Treated bars of grade Fe-550 Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position, binding and anchoring to adjacent members whereever necessary complete as per Design including cost of material, labour, usage charges complete as per specifications. (The laps and wastages shall not be measured separately)	Kgs	368.75	Work done up to the billed quantity and Quality is satisfactory
	Qty Executed Above 125%	Kgs	69.73	Work done up to the billed quantity and Quality is satisfactory
17	Providing and constructing load bearing wall with Solid Concrete blocks of size 400x150x200mm having block density more than 1800kg/m3 and minimum compressive strength of 4.00 N/mm2 conforming to IS 2185 (Part - I) - 2005 and constructed with CM 1:4 as per IS 2572:2005 including cost of all materials, labour, scaffolding and curing, usage charges of machinery etc complete as per specifications	Sqm	21.80	Work done up to the billed quantity and Quality is satisfactory
18	Dismantling plastering and removing the debris with a lead upto 200m.	Sqm	139.68	Work done up to the billed quantity and Quality is satisfactory
19	Providing 18 mm cement plaster in two coats under layer 12 mm thick cement plaster with cement mortar 1:5 (1 cement : 5 coarse sand) and a top layer 6 mm thick cement plaster with cement mortar 1:3 (1 cement: 3 coarse sand) finished rough with sponge to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge	Sqm	110.62	Work done up to the billed quantity and Quality is satisfactory
20	Providing 20 mm cement plaster of mix :1:4 (1 cement: 4 fine sand) to brick/stone masonary including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per directions of Engineer-in-charge	Sqm	21.80	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item	Unit	Qty	Comments / observations
21	Providing 12mm thick cement plaster in floating coat of neat cement of mix :1:4 to Brick masonry including rounding off corners wherever reduired smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications and as per diredtion of Engineer-in-charge	Sqm	43.06	Work done up to the billed quantity and Quality is satisfactory
22	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete as per specifications and as per directions of Engineer in charge.	Sqm	139.68	Work done up to the billed quantity and Quality is satisfactory
23	Finishing walls with Acrylic Smooth exterior paint of required shade :New work (Two coat applied @ 1.67 ltr/10 m^2 over and including priming coat of exterior primer applied @ 2.20 kg/10 m^2) with paint of approved quality to give an even shade, after thoroughly brooming the surface to remove all dirt, dust, mortar drops and foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge	Sqm	230.72	Work done up to the billed quantity and Quality is satisfactory
24	Finishing with Epoxy paint (two coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. On concrete work including preparing the surface after thorougly cleaning oil, grease, dirt and foreign matter, cost of materials, labour complete as per specifications and as per directions of Engineer-in-charge	Sqm	252.52	Work done up to the billed quantity and Quality is satisfactory
25	Providing and laying 52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per direction of Engineer incharge.	Sqm	10.41	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item	Unit	Qty	Comments / observations
	Qty Executed Above 125%	Sqm	18.65	Work done up to the billed quantity and Quality is satisfactory
26	Providing and placing on terrace(at all floor levels), polyethylene water storage tanks as per IS 12701 marked,with cover and suitable locking arrangement and making necessary holes for inlet,outlet and overflow pipes but without fittings and the base support for tank(For 1000 litre canacity)	Ltr	2000.00	Work done up to the billed quantity and Quality is satisfactory
27	Providing and laying water proofing treatment to the Roof with PU based single component elastomeric pure polyurethane based coating on New terrace/Chajjas/Sunken portion of WC:Bathroom, cold applied PU waterproofing membrane that is highly elastic with elongation greater than 400% and tensile strength greater than 2MPa as per ASTM D412. The waterproofing membrane to be applied in 2coats @ 1.6kg per m2 to achieve final DFT (dry film thickness) of 1mm including prime coat of epoxy primer @150 g per m2 and protection with 120gsm Geo-textile over the waterproofing membrane. The finished cost to include surface preparation, making coving at Junction, Bore Packing, treatment of construction joints completely as per specification & with a 10 years warranty on product & work from certified manufacturers as per the direction of the Engineer In charge	Sqm	83.33	Work done up to the billed quantity and Quality is satisfactory
28	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I. brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :W.C. pan with ISI marked white solid plastic seat and lid	Each	2.00	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item	Unit	Qty	Comments / observations
29	Providing and fixing one piece construction white vitreous china squatting plate with an integral longitudinal flushing pipe, white P.V.C. automatic flushing cistern, with fittings, standard size G.I. / PVC flush pipe for back and front flush with standard spreader pipes with fittings, G.I clamps and C.P. brass coupling complete, including painting of fittings and cutting and making good the walls and floors etc. wherever required : Single squatting plate with 5 litre P.V.C. automatic flushing cistern	Each	2.00	Work done up to the billed quantity and Quality is satisfactory
30	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical condition LED light fighting 4' - 28 watts complete and as per the directions of the Engineer-in-charge of the work	Each	15.00	Work done up to the billed quantity and Quality is satisfactory
31	Supplying and fixing of slim patty fitting, made out of CRCA Sheet metal body with locking type holder completely wired Excluding Ballast & Fluorescent Tube	Each	8.00	Work done up to the billed quantity and Quality is satisfactory
32	Supplying heavy gauge PVC conduit pipe ..... mm dia.....mm thick confirming to IS 2509 with suitable size bends, metal/PVC Junction boxes,	M	40.00	Work done up to the billed quantity and Quality is satisfactory
33	Supply and delivery of Centrifugal pumpset at site brand new best make and with discharge duty confirming to ISI standards and its latest amendments2 HP, Size 50x40 Head 22M, Discharge 186 LPM	Each	2.00	Work done up to the billed quantity and Quality is satisfactory

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Sl.No	Description of the Item	Unit	Qty	Comments / observations
34	Supplying of Ceiling Fan with Capacitor rating As per guideline of BEE 5 star rating and IS:374/79 and also comply with IS: 1709/1984 with latest amendment, Rated voltage 220 V/50 Hz, Rated power input 48 W +/- 10 %, Rated current As per IS:374/79, Rated power factor 0.9 lagging(min), Rated speed 350 +/- 10% RPM, Rated air delivery 210 +/- 10% Cubic Meter Minimum, Rated service value 4.2 CMM / W, Three Blades of blade leaf 1.05 mm thick Aluminium Alloy sheet, Class B motor insulation, Bearing Two ball bearings, Top 6202, Bottom 6201, as per IS specification, Motor winding, Temp rise Shall not exceed 75 deg C over and ambient of 40 0C by resistance method at 245 V, Insulation resistance Shall not be less than Two Mega Ohms (2M Ohms), Leakage current Should not exceed 210 Micro Amp, Power input, W& current, Air Delivery & Fan Speed as per IS:374/1979 with latest amendment. 2 year manufacturer Warranty.	Each	5.00	Work done up to the billed quantity and Quality is satisfactory
35	Round S S Chairs for samudhayabhavana. complete as per specification and Directions of Engineer In Charge	Nos	50.00	Work done up to the billed quantity and Quality is satisfactory
36	Spacepanda Apollon Full Stainless Steel Folding Table, 18 gauge ,multipurpose table, Metal conference table (Free Standing , finish color - Grey, pre- assembled) for samudhayabhavana. complete as per specification and Directions of Engineer In Charge.	No	8.00	Work done up to the billed quantity and Quality is satisfactory
37	GREEN SOUL Seuol-X Mid Back Ergonomic Chair (Home Office, WFH Moulded Foam Extra Comfort Faabric Office Executive Chair complete	Each	1.00	Work done up to the billed quantity and Quality is satisfactory
38	Godrej Boltless Rack for Storing books of all types. complete as per specification and Directions of Engineer In Charge.	Each	1.00	Work done up to the billed quantity and Quality is satisfactory
39	Nilkamal Metalica visitor Chair, complete as per specification and Directions of Engineer In Charge.	Each	4.00	Work done up to the billed quantity and Quality is satisfactory
40	Four Shelf Almirah for Office and institutional usage .made with painted or powder coated ISI Grade mild steel body complete as per specification and Directions of Engineer In Charge.	Each	1.00	Work done up to the billed quantity and Quality is satisfactory

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SLNo	Description of the Item	Unit	Qty	Comments / observations
41	Woodyou Acura Office Table - home office desk designed to effortlessy hide computer equipment complete as per specification and Directions of Engineer In Charge.	Each	1.00	Work done up to the billed quantity and Quality is satisfactory
42	Rubber door mats. complete as per specification and Directions of Engineer In Charge.	Each	6.00	Work done up to the billed quantity and Quality is satisfactory

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QC ABSTRACT

Works: 'Repair and Renovation to Samudaya Building at JP Colony in ward no-05 Yelahanka New Town Sub BBMP, Bangalore.

Item	Quantity As Per BOQ	Required No's of testes as per frequency	Actual No's of testes as per frequency	Testes Resuts
1:3:6	2.88 Cum	1	1	Pass
Steel	438.48 Kgs	1	1	Pass
Slab - 100mm	69.66 sqm	1	1	Pass
CC Blocks	21.80 Sqm	1	1	Pass
M25	6.26 Cum	2	3	Pass
Vetrified Tiles	48.01 Sqm	1	1	Pass

Cubes	0-5 Cum	1Set
	6-15 Cum	2Set
	16-30 Cum	3Set
	31-50 Cum	4Set
	Add 1set for extra 50Cum	

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